

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A single channel method for estimating a halftone screen frequency from image data, comprising:
  - multiplying a frequency measurement signal by a factor;
  - adding the multiplied frequency measurement signal to an image data signal to produce an output signal; ~~and~~
  - adjusting the factor multiplied to the frequency measurement signal based on a control signal, wherein the control signal is based on a characteristic of the image data; and
  - interpolating the output signal to produce the halftone screen frequency estimate.
2. (Original) The method of claim 1, further comprising:
  - measuring a contrast within a window of the image data to produce the control signal.
3. (Original) The method of claim 1, further comprising:
  - filtering the image data using a low-pass filter to produce the image data signal.
4. (Original) The method of claim 1, further comprising:
  - sub-sampling the image data to produce the image data signal.
5. (Canceled)
6. (Original) The method of claim 1, further comprising:
  - subtracting a frequency signal from the image data signal, to produce the frequency measurement signal.

7. (Currently Amended) The method of claim 1, further comprising:  
outputting the output signal which is an estimate of the halftone screen frequency, to a de-screening device.
8. (Currently Amended) An apparatus for estimating a halftone screen frequency, comprising:  
a multiplier which multiplies a frequency measurement signal by a factor;  
a combiner which combines the multiplied frequency measurement signal with an image data signal to produce an output signal; ~~and~~  
an adjuster which adjusts the factor multiplied to the frequency measurement signal based on a control signal, ~~the control signal being~~ wherein the control signal is based on a characteristic of the image data; and  
an interpolator for interpolating the output signal to produce the halftone screen frequency estimate.
9. (Original) The apparatus of claim 8, further comprising:  
a contrast measuring device which measures contrast within a window of the image data to produce the control signal.
10. (Original) The apparatus of claim 8, further comprising:  
a low-pass filter for filtering the image data to produce the image data signal.
11. (Original) The apparatus of claim 8, further comprising:  
a sub-sampling filter for sub-sampling the image data to produce the image data signal.
12. (Canceled)
13. (Original) The apparatus of claim 8, further comprising:  
a subtracting module for subtracting a frequency measurement from the image data signal, to produce the frequency measurement signal.

14. (Currently Amended) The apparatus of claim 8, further comprising:  
an output device for outputting to a de-screening device the output signal  
which is an estimate of the halftone screen frequency.

15. (Currently Amended) ~~An~~ A single channel apparatus for estimating a halftone  
screen frequency, comprising:

means for combining a multiplied frequency measurement signal with an  
image data signal to produce an output signal; ~~and~~

means for adjusting a factor multiplied to the frequency measurement signal;

and

means for interpolating the halftone screen frequency.

16. (Currently Amended) The apparatus of claim 15, further comprising:

means for measuring ~~contrast~~ a contrast of the image data;

means ~~producing~~ for producing the image data signal; and

~~means for producing the screen frequency estimate; and~~

means ~~producing~~ for generating the frequency measurement signal.

17. (Currently Amended) A tangible computer-readable medium that stores  
computer-executable instruction which, when executed by a computer, causes the computer  
~~or a carrier wave encoded~~ to perform the method of claim 1.

18. (Canceled)

19. (Canceled)